

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSENDER FOR PATENTS PO Box 1430 Alexandria, Virginia 22313-1450 www.wopto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,832	06/20/2006	Christa Schmitt	23380	3714
535 7590 04/30/2008 K.F. ROSS P.C.			EXAMINER	
5683 RIVERDALE AVENUE			HO, TAN	
SUITE 203 BOX 900 BRONX, NY 10471-0900			ART UNIT	PAPER NUMBER
2110111,111	10171 0300		2821	
			MAIL DATE	DELIVERY MODE
			04/30/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Application No. Applicant(s) SCHMITT ET AL. 10/549 832 Office Action Summary Examiner Art Unit Tan Ho 2821 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 20 June 2006. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-6 is/are pending in the application. 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-6 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 16 September 2006 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date 09/2005.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

Interview Summary (PTO-413)
Paper No(s)/Mail Date.

6) Other:

Notice of Informal Patent Application

Application/Control Number: 10/549,832

Art Unit: 2821

#### DETAILED ACTION

### Claim Rejections - 35 USC § 102

 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- Claims 1-3, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Munzberg (EP A 0 534 290), cited by applicant.

Munzberg discloses, in figure, a high frequency device for a vehicle antenna comprising a circuit board 1, wherein the circuit board having a recess extending transversely of a curved surface.

### Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over 10/299,870 (US Patent 6,166,698), cited by applicant, in view of Leong (US Patent 6,762,562).

Turnbull et al disclose, in figure 3, an antenna device mounted on a windshield of a vehicle comprising a multi-layered circuit board contained an antenna element 50 and circuits 80. The patent to Turnbull et al also teaches that the microwave antenna 50

Application/Control Number: 10/549,832

Art Unit: 2821

could be provided on a non-planar substrate thereby allowing greater flexibility in the mounting of the antenna, see column 6, lines 61-64. The patent to Turnbull et al differs from the claimed invention because it does not disclose the recess formed on the circuit board. Leong discloses, in figures 1 and 2, a flexible circuit board 34 mounted on a tubular housing 24. The patent to Turnbull et al also teaches that the main outer tubular housing can be provided any shapes and a plurality of slits or recesses provided an the flat flexible circuit board allows to fit the circuit board into the curvature of the main outer tubular housing, see column 7, lines 54-59. Therefore it would have been obvious to provide the antenna circuit board of Turnbull et al with the recess for the purpose of fitting the circuit board to the curvature as taught by Leong.

The patents to Ooe et all and Sievenpiper et all are cited as of interest showing the antenna disposed on the vehicle similar to that disclosed.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Ho whose telephone number is (571) 272-1822. The examiner can normally be reached on M-F (8:00AM - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Owens can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/549,832 Page 4

Art Unit: 2821

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tan Ho/ Primary Examiner, Art Unit 2821